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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,585	05/13/2005	Roland Karlsson	1501-1275	4573

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EXAMINER	
GOEL, DINESH K	

ART UNIT	PAPER NUMBER
4134	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,585	KARLSSON ET AL.	
	Examiner	Art Unit	
	DINESH GOEL	4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 October 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/18/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.
>
> When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).
>
> In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims **9-13** define a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer- readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to

be realized" – Guidelines Annex IV). That is, the scope of the presently claimed **computer** program can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-13** are rejected under 35 U.S.C. 102(b) as being anticipated by Kompella et al (US Patent Number 5892754).

Referring to claim 1, Kompella et al disclose a system similar to an arrangement for adaptive rate control of when packets are to be transmitted in a connection between a sender ("Network Endnode 2" in Figure 1) and a receiver ("Network Endnode 8" in Figure 1) in a packet switched data network (Figure 1, Column 3 Lines 44-47) , said arrangement comprising generic control means (Kompella et al teach that the generic control functions are performed by User Request Processor and Network Parameter Monitor in combination with User Application, shown as "44", "37 ", and "40" respectively in Figure 1, and described in Column 5 Lines 53 - Column 6 Line 2) arranged in the sender and the receiver, for performing adaptive rate control according to a generic algorithm and at least one application specific control means ("40" in Figure 2) to control the function of

the generic control means in dependence of the characteristics of the application (Kompella et al teach that the application specific control functions are provided by User Application ("40", "41", or "42" in Figure 2 and described in Column 8 Line 45-62), said arrangement being characterized in that the application-specific control means is arranged in the receiver to enable application specific control of the communication performed on the receiver side..

Referring to claim 2, Kompella et al further teach an arrangement according to claim 1, wherein the generic control means ("44" and "37" in Figure 2) is controlled by at least one configuration parameter (Column 6 Lines 41-43) and said application-specific control means ("40" in Figure 2) is arranged to provide at least one configuration parameter to the generic control means for controlling the function of the generic control means (Column 5 Lines 57-60).

Referring to claim 3, Kopella et al further teach an arrangement according to claim 1 wherein the generic control means ("44" and "37" in Figure 2) is arranged to monitor the quality of the rate control and output a set of quality data indicative of such quality (Column 6 Lines 32-38) .

Referring to claim 4, Kopella et al further teach an arrangement according to claim 3, wherein the set of quality data includes measurements of latency and/or packet loss (Column 5 Lines 26-28).

Referring to claim 5, Kopella et al further teach an arrangement according to claim 1, wherein the set of quality data is provided to the application-specific control means ("40" in Figure 2) and used by the application-specific control means to set the at least one configuration parameter (Column 5 Lines 65-67, Lines 57-60).

Referring to claim 6, Kopella et al further teach an arrangement according to claim 1, wherein the generic control means ("44" and "37" in Figure 2) is implemented in at least one network server and in low-level client software (network endnode in Figure 2).

Referring to claim 7, Kopella et al further teach an arrangement according to claim 1, wherein the application-specific control means ("40" in Figure 2) is implemented as an application-level software module (Column 2 Lines 52-56).

Referring to claim 8, Kopella et al further teach an arrangement according to claim 1, wherein the application-specific control means ("40" in Figure 2) is dependent on the type of channel used for the connection (Column 6 Lines 41-43).

Referring to claim 9, Kopella et al further teach a computer program product intended for use in a receiver of communication in a packet based data network, for adaptive rate control performed at the receiving side in a packet data network, said product comprising computer readable code means which, when run on a computer causes the computer to provide at least one configuration parameter to a generic control means for adaptive rate control, in order to control the adaptive rate control provided by the generic control means (Column 6 Lines 7-13, Column 5 Lines 53 - Column 6 Line 2).

Referring to claim 10, Kopella et al further teach a computer program product according to claim 9, wherein the ARC statistics data includes measurements of latency and/or packet loss (Column 6 Lines 7-13, Column 5 Lines 26-28).

Referring to claim 11, Kopella et al further teach a computer program product intended for use in a receiver of communication in a packet based data network, for adaptive rate control performed at the receiving side in a packet data network, said product comprising computer readable code means which, when run on a computer is arranged to receive from an application-specific control means at least one configuration parameter in order to control the function of the computer program product (Column 6 Lines 7-13, Column 6 Lines 41-43).

Referring to claim 12, Kopella et al further teach a computer program product according to claim 11, further arranged to monitor the quality of the rate control and output a set of quality data indicative of this quality (Column 6 Lines 7-13, Column 5 Line 57).

Referring to claim 13, Kopella et al further teach a computer program product according to claim 11, further arranged to transmit said quality data to the application-specific control means (Column 5 Lines 65-67, Lines 57-60).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINESH GOEL whose telephone number is (571)270-5201. The examiner can normally be reached on Monday-Friday 8:00 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lun Yi Lao can be reached on 571-272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. G./
Examiner, Art Unit 4134

/LUN-YI LAO/
Supervisory Patent Examiner, Art Unit 4134